

Astronomers Looking for Fireworks From Total Eclipse of Sun in the West

By MALCOLM W. BROWNE

Special to The New York Times

BIG SKY, Mont., Feb. 25 — As the shadow of the moon races across the United States and Canada tomorrow morning, thousands of amateur astronomers were to join professionals in looking for the undiscovered comets and solar storms that sometimes become visible during eclipses.

Astronomers here noted today that the sun was currently in a period of violent activity more intense than any recorded in more than 20 years, and that some special fireworks during the eclipse seemed probable.

Eclipse-watchers were still looking for good vantage points all along the path of total eclipse, which stretched from the Stateside, Washington, eastward through Montana and Manitoba, Canada. In New York City, the eclipse was to be only 61 percent at maximum. That was to occur about 12:15 P.M.

In Montana, astronomers were fearful that uncertain weather might make viewing the eclipse impossible. Some hoped to find clear weather at the last moment by moving in cars, airplanes, buses and on skis and foot. For many, this eclipse had a special importance, since it will be the last total eclipse of the sun in the continental United States until the year 2017.

The largest single group of eclipse watchers, more than 500 people, was organized by Dr. Philip S. Sigler, a professor of sociology at City University of New York. Dr. Sigler, his wife and brother-in-law, Dr. Theodore Pedas, planetarium director at Youngstown University, Ohio, have chartered entire ships in recent years to accommodate eclipse viewers in various parts of the world. This year they

were relying on a caravan of buses to look for fair weather.

Another member of the group, M. Scott Carpenter, a former astronaut, was to take to the air to search for a hole in the snow squalls that were threatening to obscure the eclipse. He was to report by radio to the meteorologist in the bus caravan, Dr. Edward M. Brooks, professor of geophysics at Boston College, who was to direct the bus driver.

"In the space of a few minutes," he said, "the moon's shadow will plunge the temperature of the upper ionosphere by several hundred degrees. This will cause a momentary reduction in the pressure of the gas at that spot and will start a wave traveling outward along the upper layer of gas around the world, much like dropping a pebble in a pond."

"The wave will be measured by our radiotelescope as it passes over Puerto Rico several hours later," Dr. Drake said. "This kind of phenomenon sheds light on the structure of the earth's ionosphere."

Despite the ice-covered mountain roads, bitter-cold temperatures and snowy weather, the astronomers and laymen on the expedition hoped to see a solar display unequalled since 1937, when another eclipse occurred during a particularly violent solar period.

The ghostly white corona was likely to display many sharp spikes and irregularities in eclipse. The deformations were predicted because of the explosive force of storms on the sun's face, which would drive the ethereal shell of ultra hot gas surrounding the sun into unusual patterns.

Dr. Mark R. Chartrand 3d, chairman of the Hayden Planetarium in New York

Partial Eclipse Is Due Over New York City

In today's eclipse, only 61 percent of the sun will be covered over New York City. The city's partial eclipse will begin at about 10:59 A.M. and will last until about 1:31 P.M. The eclipse over New York will be maximum at about 12:15 P.M., when the sun is almost due south. The first nick to appear in the solar disk as the eclipse begins will be in the part of the sun's face corresponding to 2:45 on the face of a clock.

In a partial eclipse, viewers should not look directly at the sun. One recommended way involves using photographic film as a filter. A roll of black and white film should be exposed to light then developed. The film will be black and should be used in two or more layers.

City, told expedition participants today that especially good views of the planets Mercury, Mars and Venus near the totally eclipsed sun were expected.

Another astronomer here, Dr. Frank D. Drake of Cornell University, expected some interesting atmospheric results from the eclipse. Dr. Drake, who is also director of the National Astronomy and Ionosphere Center and its enormous radiotelescope in Arecibo, P.R., said the eclipse would produce an abrupt cooling of the rarified gas at the upper edge of our atmosphere, sphere, which may be related to earth weather.

Sometimes, comets wandered undetected into the inner-solar system and were seen near the sun only when the sun was eclipsed, Dr. Drake said, adding that it was hoped during every eclipse that this would happen.

New-Measurement Attempts

In other parts of the total-eclipse zone, scientists working from more or less fixed installations were to attempt to make new measurements.

In Brandon, Manitoba, Dr. Jay M. Pasachoff, director of the Williams College Observatory, had set up an apparatus with which he hoped to measure the density of the corona by examining the spectrum of a special type of incandescent iron.

His experiment was designed to disclose instabilities in the gas of the sun's corona. Such information would bear on efforts to design a machine for harnessing fusion energy on earth.

Instruments were also to be carried aboard several airplanes that were to study the eclipse from above the clouds.

Astronomers here and elsewhere noted that since the advent of orbiting observatories, scientists had been able to learn much more about the sun than was ever possible with terrestrial equipment. Consequently, professional interest in eclipses has declined markedly since the early 1970's.

"But for some kinds of observations you still can't beat the real thing," Dr. Pasachoff said.



Patrick Lindsay of Ch...
Los Angeles for \$400

1936 Mercedes
For \$400

LOS ANGELES, Feb. 25 — A car enthusiast, bidding from Monte Carlo, today Mercedes Benz 500-K, \$400,000, almost twice the price paid for an automobile. Christie's declined to identify the car.

Only moments before, a 1929 Model SS 38-2, \$320,000 to a California resident.

The cars were sold at an Los Angeles Convention Center, the London auctioneer's, the London auctioneer's.

Fifty-three cars in all, most of the attention was on 14 cars in the collection of deceased Los Angeles businessman had the two Mercedes in his collection.

The previous record for a car sold at auction was \$235,000, Deuesenberg last year.

"I only intended to spend said Skip Berg, the 37-year-old Calif., businessman who was

Still a Hoax to Flat-Earth Group

Most people have come to accept the idea that the sun, the earth and the moon are all spheres, and that eclipses occur because of the rotation of the earth around the sun and of the moon around the earth. But one group of people, the International Flat Earth Research Society, contends that such an explanation is merely part of a gigantic hoax.

The president of the Flat Earth Society, Charles K. Johnson of Lancaster, Calif., believes that photographs taken from space, accounts of space travel and virtually everything else connected with modern science are all part of the hoax.

"Ever since Copernicus, the new religion — science, they call it — has been trying to fool the people with this notion that the earth is a ball," Mr. Johnson said in an interview.

"Starting around 1600, the facts were cast away by the priests of the new religion," he said, "and the vast, global con game began. They got most people to accept their hoax, but not us."

Nicolaus Copernicus was a Polish astronomer whose 1543 publication describing the motion of planets around the sun

revolutionized astronomy. Formerly, the views of Ptolemy had prevailed, that the earth was the center of the universe around which everything else circled.

Mr. Johnson said that the society he heads, which was founded in 1988, now has about 1,500 formal members in the United States, in addition to some 2,000 believing outsiders. Members pay a \$10 annual fee, for which they receive copies of the society's quarterly magazine, Flat Earth News.

The society president said he planned to "call President Carter's attention to the fact" that in 1959 a movie was made by the Three Stooges about a comic rocket trip to the planet Venus. "Purported photographs taken since then about space travel should be considered in the same category, as entertainment, rather than fact," he said.

"Only 10 or 20 percent of the people in the United States believe the hoax that men have traveled to the moon," Mr. Johnson said.

Asked how he would explain the eclipse of the sun, Mr. Johnson said, "We don't really go into all that. The Bible tells us that the heavens are a mystery."

A Town in Texas Ponders Mystery of 1897 Spaceman

Special to The New York Times

AURORA, Tex., Feb. 23 — If the little man from outer space hadn't died when his cigar-shaped spaceship plowed into Judge J.S. Proctor's window on April 19, 1897, this would be like any other rural community left to wither when the railroad went elsewhere just after the turn of the century.

in U.F.O. newsletters and newspaper reports.

"It's not true," said one member, who asked not to be identified. "It's all nonsense. We'd appreciate it if people would just let it drop. I wasn't here at the time, but I've got some common sense, and I know none of those stories



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